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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,208

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Barton D. Gaskins

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EXAMINER

YANG, ANDREW

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/606,208	Applicant(s) GASKINS ET AL.	
	Examiner ANDREW YANG	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-46,50-63,78-86 and 98-111 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-46,50-63,78-86 and 98-111 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the **Amendment After Final** filed on **December 20, 2007**,
PROSECUTION IS HEREBY REOPENED.

Allowable Subject Matter

The indicated allowability of claims 33-46, 50-63, 78-86, 94-110, 111/94, 111/95, and 111/97 is withdrawn in view of the newly discovered reference(s) to Klimack et al., Colman, Yamazaki et al. and Asakura et al. Rejections based on the newly cited reference(s) follow.

Election/Restrictions

As stated in the Office Action Mailed on September 20, 2007, Applicant's elected Species A of Fig. 9 (Claims 33-86 and 98-111) without traverse in the reply filed on 6/18/2007 has been acknowledged. Claims 94-97 are withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33-46, 78-86, and 111 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 33-46 and 111 lack proper antecedents. The claims depend on upon claims which have been withdrawn from consideration.

In claim 78, it is unclear what applicant refers to as "a second actuation unit" since there is no recitation of a first actuation unit. It is considered that only 1 actuation unit is needed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 98, 99, 102, 105, 109, and 110 are rejected under 35 U.S.C. 102(e) as being anticipated by Klimack et al. (U.S. Publication No. 2002/0108478).

Kilmack et al. discloses a cutting device with a cutter 42, a clamping mechanism 40, and a slide mechanism 164. The slide mechanism slides substantially parallel to the lengthwise direction of the substrate (Paragraph 128). A first actuation unit 166 moves the slide mechanism 164 and consists of a variable speed electric motor 190. a second hydraulic actuation unit 86 controls the clamping mechanism. A controller controls the first and second actuation units (Paragraph 160). The can vary the speed of the slide mechanism 164 and also the force at which the blade cuts into a material

(Paragraph 160). A sensor is also associated with the device for detecting prescribed conditions during operation (Paragraph 111).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50-63, 78-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colman (U.S. Patent No. 6012660) in view of Asakura et al. (U.S. Patent No. 6012660 and further in view of Yamazaki et al. (U.S. Patent No. 4271740).

Colman discloses a substrate cutting device with a base formed from table 14 and base 12. The table portion 14 of the base has a cutter 110 a cutter and a substrate cutter extending through the table portion 14 of the base to position a substrate in contact with the cutter 110. It is disclosed that the surface 74 of the table 14 is recessed (Column 9, Lines 24-74) and is considered the chute. A tower 16 is coupled to the base having a lower surface containing a recess aligned with the chute and a clamping mechanism 60. The recess is considered to be where the clamping mechanism is received into tower 16. The cutter 110 is in a slide mechanism (Figure 4). An actuation unit is used to clamp the clamping mechanism and to rotate the clamping mechanism in order to shave the substrate. The actuation mechanism can be pneumatic or hydraulic (Column 15, Lines 44-49) and electric. The speed of rotation to cause shaving can be

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varied. With regard to claims 78, and 81-86, the same actuation unit can be used to control the clamping pressure, which can also be varied.

Colman fails to disclose the first actuation unit applying 600-900 lbs of force or 700-800 lbs of force. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the first actuation unit of Colman to apply a force of 600-900 or 700-800 lbs of force, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the second actuation unit of Colman. to apply a force of 150-250, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Colman fails to disclose that a computer controller is used for controlling the device and a sensor. Asakura et al. teaches a computer controller for controlling a cutting device and a sensor for receiving data (Column 6, Lines 42-55). It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Colman with a computer controller and a sensor in view of Asakura et al. Using a known technique of a computer controller as taught by Asakura et al. would have been obvious to one skilled in the art. Furthermore, it is considered that only providing a computer as a controller requires ordinary skill in the art.

Colman and Asakura et al. fail to teach that the substrate remains fixed as the cutter moves relative to the substrate. Furthermore, Colman and Asakura et al. disclose the claimed invention except for the cutter is rotated a predetermined amount, a first actuation unit, and variably controlling the speed of the slide mechanism. Yamazaki et al. teaches a rotary cutting device in which the cutter moves relative to the substrate during a cutting stroke. (Column 3, Lines 28-34). The cutting device has a blade 23 on a slide mechanism. Yamazaki et al. also teaches that the speed of the slide mechanism can be variable (Column 6, Lines 30-34) and since the cutters are rotated, it is considered to have an actuation unit. It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Colman as modified by Asakura et al. with the cutter moving relative to the substrate at a variable speed further in view of Yamazaki et al. Providing a rotary cutter with a cutter that moves relative to the substrate would have been obvious to one skilled in the art. In addition constructing the cutter to move with respect to the substrate in the device of Colman requires only reversing the function of the table 14 and the tower 16 which within the capability of one with ordinary skill in the art.

Claims 103, 104, 106, 107, 108, and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klimack et al. (U.S. Publication No. 2002/0108478).

With regard to claims 106 and 107, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the second actuation unit of Klimack et al. to apply a force of 150-250, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With regard to claims 103, 104, 108, and 110, it would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the first and second actuation units in a pneumatic form or an electric form, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous configurations a person ordinary skill in the art would find obvious for the purpose of providing an actuation unit. In re Dailey and Eilers, 149 USPQ 47 (1966).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW YANG whose telephone number is (571)272-3472. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Yang/
Examiner, Art Unit 3733
2/19/2008

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733